Delineation / Mitigation / Restoration / Habitat Creation / Permit Assistance

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CRITICAL AREA STUDY

For

Scrivanich-116th Street

Wetland Resources, Inc. Project #13185

Prepared By:

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For:

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September 12, 2013

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PROPERTY LOCATION AND SITE DESCRIPTION

Wetland Resources, Inc. (WRI) performed a site investigation on August 26, 2013 to locate jurisdictional wetlands and streams on and in proximity to King County parcel numbers 3226059114, -113, -135, and -078. The subject property is located along NE 116th Street in the City of Kirkland, Washington. The Public Land Survey System (PLSS) locator for the subject property is Section 32, Township 26N, Range 05E, W.M. The study site is situated within the Cedar/Sammamish Watershed, or Water Resources Inventory Area (WRIA) 8, as well as the City of Kirkland Forbes Creek Drainage Basin.

The 3.46-acre subject property is comprised of four separate parcels, three of which are developed. Parcel numbers 3226059114 and -078 each contain a single-family home while parcel number -113 contains a small garage/accessory structure near the northern property boundary (the majority of the parcel is undeveloped). Parcel 3226059135 is undeveloped yet appears to be used by parcel number -078. The subject property is located in a residential setting that also contains some commercial use. Housing subdivisions border the subject property on the east and west while single-family parcels are located to the south. The northern property boundary is bordered by NE 116th Street. Interstate 405 (I-405) is approximately 2,000 feet to the east, the Totem Lake neighborhood is approximately 2,800 feet to the north and northeast, and downtown Kirkland is located approximately 2 miles to the southwest.

Vegetation on the study site is comprised of upland forested and scrub-shrub species, wetland species, landscaped areas, and maintained lawn. A large landscaped area is located on parcel 3226059113, immediately south of parcel -114. A relatively dense forested area containing native species sits to the south of the landscaped area and encompasses the remainder of the parcel. Parcel 3226059135 is dominated by native conifers and low-growing herbaceous vegetation. The northernmost portion of the study site slopes down gently to the south-southeast while the slope gradually steepens on the center portion of the site. The southern portion then slopes down gently again to the south-southeast.

One wetland and one seasonal stream were identified on the subject property during the August 26 site investigation.

REVIEW OF EXISTING INFORMATION

Prior to conducting the site investigation, public resources were reviewed to gather background information on the subject property and the surrounding area. The following information was examined:

- <u>USFWS National Wetlands Inventory:</u> The National Wetland Inventory (NWI) does not indicate any wetland areas on the subject property.
- <u>USDA/NRCS Web Soil Survey:</u> The soil mapped within the project area includes Alderwood gravelly sandy loam, 6 to 15 percent slopes, and Everett gravelly sandy loam, 5 to 15 percent slopes. Neither soil is classified as hydric by the Natural Resources Conservation Service.
- <u>WDFW SalmonScape Interactive Mapping System:</u> The SalmonScape interactive map does not show the presence of any streams on or near the subject property.

- <u>WDFW Priority Habitat and Species (PHS) Interactive Map:</u> There are no priority habitats or listed species on the subject property per the PHS Interactive Map. The nearest PHS area is a wetland located approximately 1,000 feet to the north and northeast.
- <u>King County iMap Interactive Mapping Tool</u>: The King County iMap does not show any wetlands or streams on the subject property.
- <u>City of Kirkland Sensitive Areas Map</u>: The Kirkland Sensitive Areas Map illustrates an off-site wetland bordering the subject property to the south.

METHODOLOGY

Wetland boundaries were determined using the routine determination approach described in the Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987), or Corps Manual, and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountians, Valleys, and Coast Region (Version 2.0) (U.S. Army Corps of Engineers 2010), or the Regional Supplement. Use of these manuals is required by the City of Kirkland and the Washington Administrative Code (WAC) for performing wetland delineations. Under the routine methodology, the process for making a wetland determination is based on three steps:

- 1.) Examination of the site for hydrophytic vegetation (species present and percent cover);
- 2.) Examination of the site for hydric soils;
- 3.) Determining the presence of wetland hydrology

The following criteria must be met in order to make a positive wetland determination:

Vegetation Criteria

The Corps Manual and 2010 Regional Supplement defines hydrophytic vegetation as "the assemblage of macrophytes that occurs in areas where inundation or soil saturation is either permanent or of sufficient frequency and duration to influence plant occurrence." Field indicators are used to determine whether the hydrophytic vegetation criteria have been met. Examples of these indicators include, but are not limited to, the rapid test for hydrophytic vegetation, a dominance test result of greater than 50%, and/or a prevalence index score less than or equal to 3.0.

Soils Criteria

The 2010 Regional Supplement (per the National Technical Committee for Hydric Soils) defines hydric soils as soils "that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part." Field indicators are used to determine whether a given soil meets the definition for hydric soils. Indicators are numerous and include, but are not limited to, presence of a histosol or histic epipedon, a sandy gleyed matrix, depleted matrix, and redoximorphic depressions.

Hydrology Criteria

Wetland hydrology encompasses all hydrologic characteristics of areas that are periodically inundated or have soils saturated to the surface for a sufficient duration during the growing

season. Areas with evident characteristics of wetland hydrology are those where the presence of water has an overriding influence on the characteristics of vegetation and soils due to anaerobic and chemically reducing conditions, respectively. The strongest indicators include the presence of surface water, a high water table, and soil saturation within at least 12 inches of the soil surface.

BOUNDARY DETERMINATION FINDINGS/RESULTS

Wetlands identified on the subject property were rated pursuant to the City of Kirkland's Wetland Field Data Form as required by the Kirkland Zoning Code (KZC), section 90.40(3)(h). Wetlands were classified according to the U.S. Fish and Wildlife Service (USFWS) Classifications of Wetlands and Deepwater Habitats of the United States (Cowardin et al., 1979), also known as the Cowardin Classification System, as well as the Hydrogeomorphic (HGM) Classification System (Brinson 1993).

The ordinary high water marks (OHWM) of streams and were identified using the methodology described in the Washington State Department of Ecology document *Determining the Ordinary High Water Mark on Streams in Washington State (Second Review Draft)* (Olson and Stockdale 2010). Streams were classified according to KZC 90.30(4) through (6) and 90.90.

One wetland, referred to as Wetland A for the purposes of this report, and one stream (Stream A) were identified on the subject property. These resources are described below.

Wetland A

Wetland A is a slope wetland per the HGM classification system and is located in the southeast corner of the subject property. It extends off-site to the east and south. Based on the Cowardin classification system, Wetland A is a palustrine/forested/broad-leaved deciduous/seasonally flooded & saturated wetland system.

Wetland A received an overall score of 17 points on the City of Kirkland Wetland Field Data Form. This equates to a Type 3 wetland rating. Per KZC 90.45, the buffer for a Type 3 wetland located in a primary drainage basin is 50 feet (the Forbes Creek Drainage Basin is considered a primary basin per the City of Kirkland Sensitive Areas Map).

The primary source of hydrology for Wetland A is groundwater with additional influence from Stream A. Wetland A is located in a geomorphic position that is capable of collecting excess water from precipitation, runoff, groundwater, etc. In addition, a dry-season water table was observed at a depth of 14" below the soil surface. These characteristics meet wetland hydrology indicators C2 and D2 on the 2010 Regional Supplement Wetland Delineation Data Form.

Vegetation within Wetland A is comprised primarily of deciduous forested and scrub-shrub species. Dominant species observed at sampling point S-1 include red alder (*Alnus rubra*), black cottonwood (*Populus balsamifera*), salmonberry (*Rubus spectabilis*), lady fern (*Athyrium filix-femina*), and giant horsetail (*Equisetum telmateia*), among others. Greater than 50% of the dominant species within Wetland A have an indicator status of facultative (FAC) or wetter, which meets the hydrophytic vegetation criteria per the Corps Manual and the 2010 Regional Supplement.

Soils within Wetland A are black clay loam to a depth of 11 inches, dark grayish brown between 11 and 18 inches in depth, and pale brown between 18 and 20 inches in depth. Redoximorphic features (concentrations) were observed in the soil matrix in each layer. A redox dark surface is present in the soils of Wetland A, which meets hydric soil indicator F6 on the 2010 Regional Supplement Wetland Delineation Data Form.

No nesting, denning, or breeding areas were observed in Wetland A or the surrounding area during the site investigation. The wetland and surrounding buffer is most likely utilized by various songbirds, small mammals, common amphibians and reptiles, and species suited to life in urban/suburban settings.

Stream A

Stream A is an intermittent/seasonal stream located in the southeast corner of the subject property. It originates off-site to the east, flows in a southwesterly direction through Wetland A, and continues off-site to the south. The stream was not flowing at the time of the site inspection, yet areas of shallow standing water and saturated soils/substrate were present.

The eastern, off-site portion of the stream is linear and narrow and may be a historical, manmade feature created to help with drainage. The off-site portion of the stream is actually comprised of two separate channels. These channels converge at the eastern property boundary and become one feature on the subject property and off-site to the south. The on-site portion of the stream is very short, yet wider than the eastern and southern off-site portions. The stream substrate is primarily comprised of mud, but an area of herbaceous vegetation (creeping buttercup (*Ranunculus repens*), and water parsley (*Oenanthe sarmentosa*)) is also present.

Stream A is a seasonal feature that lacks fish habitat and is not used by salmonids. Based on these characteristics, Stream A meets the criteria for a Class C stream per KZC 90.30(6). Class C streams located in primary basins within the City of Kirkland require a 35-foot buffer.

USE OF THIS REPORT

This Critical Area Study is supplied to Larry Scrivanich as a means of determining on-site critical area conditions, as required by the City of Kirkland. This report is based largely on readily observable conditions and, to a lesser extent, on readily ascertainable conditions. No attempt has been made to determine hidden or concealed conditions.

The laws applicable to critical areas are subject to varying interpretations and may be changed at any time by the courts or legislative bodies. This report is intended to provide information deemed relevant in the applicant's attempt to comply with the laws now in effect.

This delineation and report conforms to the standard of care employed by wetland ecologists. No other representation or warranty is made concerning the work or this report and any implied representation or warranty is disclaimed.

Wetland Resources, Inc.

Jim Rothwell

Senior Ecologist, PWS

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Appendix A

Wetland Rating Forms

Plate 26 WETLAND FIELD DATA FORM

(Note: Applicable to Chapter 90 KZC, but not Chapter 83 KZC)



WETLAND FIELD DATA FORM

BEGIN BY CHECKING ANY OF THE FOLLOWING (a. - e.) THAT APPLY:

- a. The wetland is contiguous to Lake Washington;
- b. The wetland contains at least 1/4 acre of organic soils, such as peat bogs or mucky soils;
- c. The wetland is equal to or greater than 10 acres in size and having three or more wetland classes, as defined by the U.S. Fish & Wildlife Service (Cowardin et al., 1979), one of which is open water;
- d. The wetland has significant habitat value to state or federally listed threatened or endangered wildlife species; or
- e. The wetland contains state or federally listed threatened or endangered plant species.

IF ANY OF THE CRITERIA LISTED ABOVE ARE MET, THEN THE WETLAND IS CONSIDERED TO BE TYPE 1. IF THAT IS THE CASE, PLEASE CONTINUE TO COMPLETE THE ENTIRE FORM, BUT DO NOT ASSIGN POINTS.

IF THE WETLAND DOES NOT MEET THE CRITERIA LISTED ABOVE FOR TYPE 1, COMPLETE THE ENTIRE FORM, USING THE ASSIGNED POINTS TO DETERMINE IF IT IS A TYPE 2 OR TYPE 3 WETLAND.

Type 2 wetlands typically have at least two wetland vegetation classes, are at least partially surrounded by buffers of native vegetation, connected by surface water flow (perennial or intermittent) to other wetlands or streams, and contain or are associated with forested habitat.

1. Total wetland area

Estimate wetland area and score from choices	Acres		Point Value	<u>Points</u>
	>20.00	=	6	
	10-19.99	=	5	
	5-9.99	=	4	
	1-4.99	=	3	
	0.1-0.99	=	2	2
	<0.1	=	1	

2. Wetland classes: Determine the number of wetland classes that qualify, and score according to the table.

	# of Classes		Points
Open Water: if the area of open water is >1/3 acre or >10% of the total wetland area	1		1
Aquatic Beds: if the area of aquatic beds is >10% of the open water area or>1/2 acre	2	=	3
Emergent: if the area of emergent class is >1/2 acre or >10% of the total wetland area	3	=	5
Scrub-Shrub: if the area of scrub-shrub class is >1/2 acre or >10% of the total wetland area	4	=	7
Forested: if the area of forested class is >1/2 acre or >10% of the total wetland area	5	=	10

3. Plant species diversity.

For all wetland classes which qualified in 2 above, count the number of different plant species and score according to the table below. You do not have to name them.

e.g., if a wetland has an aquatic bed class with 3 species, and emergent class with 4 species and a scrub-shrub class with 2 species, you would circle 2, 2, and 1 in the second column (below).

Class	# of <u>Species</u>		Point Value	Class	# of <u>Species</u>		Point Value
Aquatic Bed	1-2	=	1	Scrub- Shrub	1-2	=	1
	3	=	2		3-4	=	2
	>3	=	3		>4	=	3
Emergent	1-2	=	1	Forested	<mark>1-2</mark>		1
	3-4	=	2		3-4	=	2
	>4	=	3		>4	=	3

4. Structural diversity.

If the wetland has a forested class, add 1 point for each of the following attributes present:

Trees >50' tall = 1

Trees 20' to 49' tall = 1

Shrubs = 1

Herbaceous ground cover = 1

5. Interspersion between wetland classes.

Decide from the diagrams below whether interspersion between wetland classes is high, moderate, low or none

3 = High

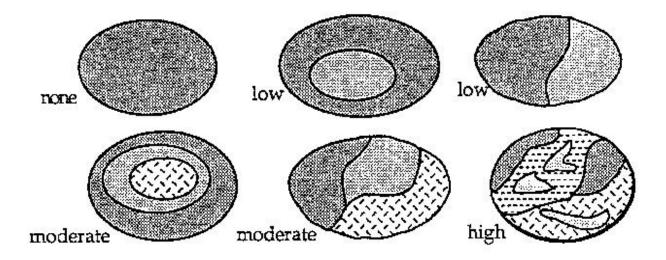
2 = Moderate

1 =

=

Low

0 = None



6. Habitat features

Add points associated with each habitat feature listed:	=	3
Is there evidence of current use by beavers?	=	2
Is a heron rookery located within 300'?	=	1
Are raptor nest(s) located within 300'?	=	1
Are there at least 2 standing dead trees (snags) per acre?2	=	1
Are there any other perches (wires, poles, or posts)?	=	1
Are there at least 3 downed logs per acre?	=	1

7. Connection to streams

Is the wetland connected at any time of the year via surface water? (score one answer only)

To a perennial stream or a seasonal stream *with* fish = 5

To a seasonal stream *without* fish = 3

Is not connected to any stream = 0

8. Buffers

Step 1: Estimate (to the nearest 5%) the percentage of each buffer or land-use type (below) that adjoins the wetland boundary. Then multiply these percentages by the factor(s) below and enter result in the column to the right.

	% of Buffer	Step 1	Width Factor	Step 2
Roads, buildings or parking lots	20% X 0 =	0	=	0
Lawn, grazed pasture, vineyards or annual crops	35% X 1 =	35	=	70
Ungrazed grassland or orchards	% X 2 =		=	
Open water or native grasslands	% X 3 =		=	
Forest or shrub	45% X 4 =	180	=	360
			Add buffer total:	430

Step 2: Multiply result(s) of step 1:

By 1 if buffer width is 25-50' By 2 if buffer width is 50-100'

By 3 if buffer width is >100'

Enter results and add sub-scores

Step 3: Score points according to the following table:

Buffer Total

900-1200 = 4

600-899 = 3

300-599 = 2

100-299 = 1

9. Connection to other habitat areas:

Is there a riparian corridor to other wetlands within 0.25 of a mile, or a corridor >100' wide with good forest or shrub cover to any other habitat area? = 5

Is there a narrow corridor <100' wide with good cover or a wide corridor >100' wide with low cover to any other habitat area? = 3

Is there a narrow corridor <100' wide with low cover or a significant habitat area within 0.25 mile but no corridor? = 1

Is the wetland and buffer completely isolated by development and/or cultivated agricultural land? = 0

10. Scoring

Add the scores to get a total: 17

Question: Is the total greater than or equal to 22 points?

Answer:

Yes = Type 2 No = Type 3

Appendix B

Delineation Data Forms

Project/Site: Scrivanich-116th Street		City/County	y: Kirkland	/King s	Sampling Date: 8/26/13
Applicant/Owner: Larry Scrivanich				State: WA S	ampling Point: S-1
Investigator(s): JR					
				, convex, none):	
Subregion (LRR): LRR-A	_ Lat:			Long:	Datum:
Soil Map Unit Name: Everett gravelly sandy loam, 5 to 1				NWI classificatio	
Are climatic / hydrologic conditions on the site typical for this	time of yea	ar? Yes] No∏(I	If no, explain in Remarks.)	
Are Vegetation, Soil, or Hydrology signifi	_	· · · · · · · · · · · · · · · · · · ·		mal Circumstances" present?	Yes No
Are Vegetation , Soil , or Hydrology natura				d, explain any answers in Re	<u> </u>
SUMMARY OF FINDINGS – Attach site map					
Hydrophytic Vegetation Present? Yes ✔ No					
Hydric Soil Present? Yes V No			e Sampled		\neg
Wetland Hydrology Present? Yes ✓ No		with	in a Wetlar	nd? Yes ✓ No	_
Remarks:					
VEGETATION – Use scientific names of plan	ts.				
201	Absolute	Dominant		Dominance Test worksh	eet:
Tree Stratum (Plot size: 30'		Species?		Number of Dominant Spec	
Alnus rubra Populus balsamifera	45% 20%	Yes Yes	FAC FAC	That Are OBL, FACW, or F	FAC: <u>5</u> (A)
		163	FAC	Total Number of Dominant	_
3				Species Across All Strata:	<u>8</u> (B)
4	65%	- Total C		Percent of Dominant Spec	
Sapling/Shrub Stratum (Plot size: 30'	00 70	= Total C	over	That Are OBL, FACW, or F	FAC: <u>62.5%</u> (A/B)
1. Rubus spectabilis	50%	Yes	FAC	Prevalence Index worksh	neet:
2. Rubus armeniacus	15%	Yes	FACU	Total % Cover of:	Multiply by:
3				OBL species 0	x 1 = <u>0</u>
4					x 2 = <u>0</u>
5					x 3 = 0
Herb Stratum (Plot size: 10'	65%	= Total C	over		x 4 = 0
1 Athyrium filix-femina	10%	Yes	FAC		x 5 = <u>0</u>
2 Polystichum munitum	5%	Yes	FACU	Column Totals: 0	(A) <u>0</u> (B)
3 Equisetum telmatiea	5%	Yes	FACW	Prevalence Index =	B/A =
4.				Hydrophytic Vegetation	
5.				Rapid Test for Hydropl	nytic Vegetation
6.				Dominance Test is >50)%
7				Prevalence Index is ≤3	6.0 ¹
8				Morphological Adaptat	ions ¹ (Provide supporting
9					on a separate sheet)
10				Wetland Non-Vascular	tic Vegetation¹ (Explain)
11				1 	nd wetland hydrology must
Manda Vine Charters (Diet sine, 10)	20%	= Total C	over	be present, unless disturbe	ed or problematic.
Woody Vine Stratum (Plot size: 10' 1. Rubus ursinus	20%	Yes	FACU		
	2070		17.00	Hydrophytic	
2	20%	= Total C	over	Vegetation Present? Yes	∕ No □
% Bare Ground in Herb Stratum 80%		- Total C	0 7 61	.33[」⋯□
Remarks:				•	

Depth	cription: (Describe Matrix	e to the det		lox Featur		or confirm	n the absence of	indicators.)
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture	Remarks
0-11	10YR 2/1	98%	7.5YR 2.5/2	2%	С	M	Clay Loam	
			-					
11-18	10YR 4/2	97%	7.5 YR 3/4	1%	С	PL	Sandy Loam	
11-10	1011 4/2	91 /0					Sandy Loani	
		=	10 YR 4/4	2%	С	M		
18-20	10YR 6/3	93%	10YR 5/6	7%	С	M	Silty Clay	
								·
		= =====						
1Type: C=C	oncentration, D=De	nlotion DM	-Boducod Matrix (CC=Cover	nd or Coot	ad Sand C	roino ² l cont	ion: PL=Pore Lining, M=Matrix.
	Indicators: (Appli					eu Sanu G		for Problematic Hydric Soils ³ :
Histosol			Sandy Redox		,			luck (A10)
	pipedon (A2)		Stripped Matrix				_	arent Material (TF2)
Black Hi			Loamy Mucky	. ,	1) (excep	t MLRA 1)	_	hallow Dark Surface (TF12)
Hydroge	n Sulfide (A4)		Loamy Gleyed					Explain in Remarks)
Depleted	d Below Dark Surfac	ce (A11)	Depleted Matr	ix (F3)				
_	ark Surface (A12)		Redox Dark S	•	,			of hydrophytic vegetation and
	lucky Mineral (S1)		Depleted Dark					hydrology must be present,
	Sleyed Matrix (S4)		Redox Depres	sions (F8)			unless o	disturbed or problematic.
Type:	Layer (if present):							
, , <u> </u>	ches):							v [7] v [7]
	CHES)		· · · · · ·				Hydric Soil Pi	resent? Yes 🗸 No
Remarks:								
HYDROLO	GY							
	drology Indicators	:						
•	cators (minimum of		d: check all that ap	(vla			Seconda	ary Indicators (2 or more required)
	Water (A1)				es (B9) (e	except MLF		er-Stained Leaves (B9) (MLRA 1, 2,
	iter Table (A2)			4A, and 4E		Moopt III-		1A, and 4B)
Saturation			Salt Crus		-,			nage Patterns (B10)
=	arks (B1)			nvertebrate	es (B13)			Season Water Table (C2)
	nt Deposits (B2)			n Sulfide O	` ,			ration Visible on Aerial Imagery (C9)
	posits (B3)				` '	Living Roo		morphic Position (D2)
_	at or Crust (B4)			of Reduc	•	•	· · · —	llow Aquitard (D3)
	osits (B5)		_		`	d Soils (C6		-Neutral Test (D5)
= '	Soil Cracks (B6)					01) (LRR A)	· =	sed Ant Mounds (D6) (LRR A)
	on Visible on Aerial	Imagery (B		oplain in Re		, (_	t-Heave Hummocks (D7)
	Vegetated Concav			•	,			,
Field Obser		•	•					
Surface Wat	er Present?	Yes No	Depth (inche	es):				
Water Table		=	Depth (inche	, 	nes			
Saturation P			Depth (inche			Wetl	and Hydrology F	Present? Yes 🗸 No
(includes ca	pillary fringe)							
Describe Re	corded Data (strear	n gauge, m	onitoring well, aeria	I photos, p	revious in	spections),	if available:	
Remarks:		_						

Project/Site: Scrivanich-116th Street		City/Coun	ty: Kirkland	/King	Sampling Date: 8/26/13	
Applicant/Owner: Larry Scrivanich				State: WA	Sampling Point: S-2	
Investigator(s): JR			Section, To	ownship, Range: S32, T2	6N, R05E	
					Slope (%): <19	%
Subregion (LRR): LRR-A						
Soil Map Unit Name: Alderwood gravelly sandy loam, 6 t						
Are climatic / hydrologic conditions on the site typical for this					·	
Are Vegetation, Soil, or Hydrology signifi				mal Circumstances" prese		
Are Vegetation, Soil, or Hydrology natura				d, explain any answers in F		
SUMMARY OF FINDINGS – Attach site map						etc
			ng pomer	- Transcott		
Hydrophytic Vegetation Present? Yes V No		ls t	he Sampled	l Area		
Hydric Soil Present? Wetland Hydrology Present? Yes No V		wit	hin a Wetlar	nd? Yes N	0	
Wetland Hydrology Present? Yes No V						
Tremaine.						
VEGETATION – Use scientific names of plan	ts.					
	Absolute		nt Indicator	Dominance Test works	sheet:	
Tree Stratum (Plot size: 30')	% Cover			Number of Dominant Sp		
1. Alnus rubra	30%	Yes	FAC	That Are OBL, FACW, o	or FAC: 4 (A)	
2. Populus balsamifera	15%	Yes	FAC	Total Number of Domina	_	
3. Frangula purshiana	5% 5%	No No	FAC FACU	Species Across All Stra	ta: <u>6</u> (B)	
4. Prunus Emarginata		-		Percent of Dominant Sp		
Sapling/Shrub Stratum (Plot size: 30')	55%	= Total	Cover	That Are OBL, FACW, o	or FAC: <u>67%</u> (A/B	3)
1 Rubus spectabilis	60%	Yes	FAC	Prevalence Index work	sheet:	
2. Rubus armeniacus	20%	Yes	FACU	Total % Cover of:	Multiply by:	
3. Crataegus sp.	10%	No	FAC	OBL species 0	x 1 = 0	
4			<u> </u>	FACW species 0	x 2 = 0	
5				FAC species 0	x 3 = 0	
100	90%	= Total	Cover	The state of the s	x 4 = 0	
Herb Stratum (Plot size: 10') 1. Polystichum munitum	5%	Yes	FACU		x 5 = 0	
o Athurium filix fomino	5%	Yes	FAC	Column Totals: 0	(A) <u>0</u> (B	3)
·		-		Prevalence Index	= B/A =	
3				Hydrophytic Vegetatio		
5.				Rapid Test for Hydro		
6.				Dominance Test is		
7				Prevalence Index is	≤3.0 ¹	
8.				Morphological Adap	tations ¹ (Provide supporting	
9.					or on a separate sheet)	
10				Wetland Non-Vascu		
11				1 	hytic Vegetation ¹ (Explain)	
	10%	= Total	Cover	be present, unless distu	and wetland hydrology must rbed or problematic.	
Woody Vine Stratum (Plot size:				,	<u>'</u>	
1			· ——	Hydrophytic		
2				Vegetation Present? Yes	No No	
% Bare Ground in Herb Stratum 90%		= rotal (Cover	Fiesein: 16	'E NOL	
Remarks:				ı		

Depth	Matrix		Red	ox Feature	es		m the absence	ŕ
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-9	10YR 2/1						Sa. Cl. Loam	
9-16	2.5YR 5/3		10YR 4/6	3%	С	M	Sa. Cl. Loam	
16-20	10YR 6/2		7.5 YR 4/6	7%	С	M	Clay	Possible restrictive layer.
10 20	10111 0/2	-	7.0 110 170				Olay	1 coolsie recirculto layer.
			-					
			-					
	Concentration, D=Dep					ed Sand G		cation: PL=Pore Lining, M=Matrix.
_	Indicators: (Applic	cable to all			tea.)			ors for Problematic Hydric Soils ³ :
Histosol	pipedon (A2)		Sandy Redox (Stripped Matrix				_	n Muck (A10) Parent Material (TF2)
	istic (A3)		Loamy Mucky	. ,	1) (excep	t MLRA 1		Shallow Dark Surface (TF12)
	en Sulfide (A4)		Loamy Gleyed			•,		er (Explain in Remarks)
	d Below Dark Surfac	e (A11)	Depleted Matri					
Thick Da	ark Surface (A12)		Redox Dark Su	urface (F6))			ors of hydrophytic vegetation and
= '	Mucky Mineral (S1)		Depleted Dark	`	=7)			nd hydrology must be present,
	Gleyed Matrix (S4)		Redox Depres	sions (F8)			unles	s disturbed or problematic.
Type: Cl	Layer (if present):							
, —	nches): Starting at 16"							B
	iches).						Hydric Soil	Present? Yes No
Remarks:								
HYDROLO	OGY							
Wetland Hy	drology Indicators	<u> </u>						
Primary Indi	icators (minimum of	one require	d; check all that app	oly)			Seco	ndary Indicators (2 or more required)
	Water (A1)			•	es (B9) (except ML	RA N	/ater-Stained Leaves (B9) (MLRA 1, 2,
=	ater Table (A2)			A, and 4E				4A, and 4B)
Saturati			Salt Crust		,		Пр	rainage Patterns (B10)
Water M	Marks (B1)		Aquatic Ir	vertebrate	es (B13)		₽ D	ry-Season Water Table (C2)
	nt Deposits (B2)		Hydrogen	Sulfide O	dor (C1)		□ s	aturation Visible on Aerial Imagery (C9)
Deith Da	posits (B3)		П a``.	Rhizosohe				
	posits (Do)		Oxidized	<u>_</u>	eres along	Living Ro		eomorphic Position (D2)
_	at or Crust (B4)		_	of Reduce	-	-	ots (C3) G	
Algal Ma			Presence	of Reduce	ed Iron (C	-	ots (C3) G	eomorphic Position (D2)
Algal Ma	at or Crust (B4)		Presence Recent Ire	of Reduce	ed Iron (Cion in Tille	4)	ots (C3)	eomorphic Position (D2) hallow Aquitard (D3)
Algal Ma	at or Crust (B4) posits (B5)	magery (B'	Presence Recent Iro Stunted o	of Reduce	ed Iron (Co ion in Tille I Plants (D	4) ed Soils (C	ots (C3)	eomorphic Position (D2) nallow Aquitard (D3) AC-Neutral Test (D5)
Algal Ma	at or Crust (B4) posits (B5) Soil Cracks (B6)		Presence Recent Iro Stunted o Other (Ex	of Reduct on Reduct r Stressed	ed Iron (Co ion in Tille I Plants (D	4) ed Soils (C	ots (C3)	eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
Algal Ma	at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial I y Vegetated Concave		Presence Recent Iro Stunted o Other (Ex	of Reduct on Reduct r Stressed	ed Iron (Co ion in Tille I Plants (D	4) ed Soils (C	ots (C3)	eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
Algal Ma Iron Dep Surface Inundati Sparsel	at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial I y Vegetated Concave rvations:	e Surface (I	Presence Recent Iro Stunted o Other (Ex	of Reduce on Reduct r Stressed plain in Re	ed Iron (Co ion in Tille I Plants (D	4) ed Soils (C	ots (C3)	eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
Algal Ma Iron Dep Surface Inundati Sparsel	at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial I y Vegetated Concave rvations: tter Present?	e Surface (l	Presence Recent Irr Stunted o Other (Ex	of Reduce on Reduct r Stressed plain in Re	ed Iron (C ion in Tille I Plants (C emarks)	4) ed Soils (C	ots (C3)	eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
Algal Ma Iron Dep Surface Inundati Sparsel Field Obse Surface Wa Water Table Saturation F	at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial I y Vegetated Concave rvations: ter Present? Present?	e Surface (l	Presence Recent Irr Stunted o Other (Ex	of Reduce on Reduct r Stressed plain in Re	ed Iron (C ion in Tille I Plants (C emarks)	4) ed Soils (Co	ots (C3)	eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
Algal Ma Iron Dep Surface Inundati Sparsely Field Obset Surface Wa Water Table Saturation F (includes ca	at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial I y Vegetated Concave rvations: ter Present? Present?	e Surface (I	Presence Recent Ird Stunted of Other (Ex B8) Depth (inche	of Reduce on Reduct r Stressed plain in Re es): es):	ed Iron (C ion in Tille I Plants (C emarks)	4) od Soils (Ci	ots (C3) G G SI	eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
Algal Ma Iron Dep Surface Inundati Sparsely Field Obset Surface Wa Water Table Saturation F (includes ca	at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial I y Vegetated Concave rvations: ter Present? Present?	e Surface (I	Presence Recent Ird Stunted of Other (Ex B8) Depth (inche	of Reduce on Reduct r Stressed plain in Re es): es):	ed Iron (C ion in Tille I Plants (C emarks)	4) od Soils (Ci	ots (C3) G G SI	eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
Algal Malgal Mal	at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial I y Vegetated Concave rvations: ter Present? Present?	e Surface (I	Presence Recent Ird Stunted of Other (Ex B8) Depth (inche	of Reduce on Reduct r Stressed plain in Re es): es):	ed Iron (C ion in Tille I Plants (C emarks)	4) od Soils (Ci	ots (C3) G G SI	eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
Algal Ma Iron Dep Surface Inundati Sparsely Field Obset Surface Wa Water Table Saturation F (includes ca	at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial I y Vegetated Concave rvations: ter Present? Present?	e Surface (I	Presence Recent Ird Stunted of Other (Ex B8) Depth (inche	of Reduce on Reduct r Stressed plain in Re es): es):	ed Iron (C ion in Tille I Plants (C emarks)	4) od Soils (Ci	ots (C3) G G SI	eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
Algal Malgal Mal	at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial I y Vegetated Concave rvations: ter Present? Present?	e Surface (I	Presence Recent Ird Stunted of Other (Ex B8) Depth (inche	of Reduce on Reduct r Stressed plain in Re es): es):	ed Iron (C ion in Tille I Plants (C emarks)	4) od Soils (Ci	ots (C3) G G SI	eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)

Project/Site: Scrivanich-116th Street		City/Count	y: Kirkland/	/King	Sampling Date: 8/26/13
Applicant/Owner: Larry Scrivanich				State: WA	Sampling Point: S-3
Investigator(s): JR					
					Slope (%): 1%
					Datum:
Soil Map Unit Name: Alderwood gravelly sandy loam, 6 t					
Are climatic / hydrologic conditions on the site typical for this					vii
Are Vegetation, Soil, or Hydrology signifi	•			mal Circumstances" present	2 Vac V
Are Vegetation, Soil, or Hydrology natura			·	d, explain any answers in Re	,
SUMMARY OF FINDINGS – Attach site map	snowing	sampiin	ig point i	ocations, transects, i	mportant features, etc.
Hydrophytic Vegetation Present? Yes No		ls th	ne Sampled	l Area	
Hydric Soil Present? Yes No			in a Wetlar		v
Wetland Hydrology Present? Yes No					
Remarks:					
VEGETATION – Use scientific names of plan	te				
VEGETATION – Ose scientific flames of plan	Absolute	Dominant	Indicator	Dominance Test worksh	neet:
Tree Stratum (Plot size: 30')		Species?		Number of Dominant Spe	
1. Prunus Emarginata	15%	Yes	FACU	That Are OBL, FACW, or	
2. Populus balsamifera	15%	Yes	FAC	Total Number of Dominar	nt
3. Pseudotsuga menzesii	10%	Yes	FACU	Species Across All Strata	_
4				Percent of Dominant Spe	cies
Sapling/Shrub Stratum (Plot size: 30')	40%	= Total C	Cover	That Are OBL, FACW, or	
1. Corylus cornuta	20%	Yes	FACU	Prevalence Index works	heet:
2. Oemleria cerasiformus	10%	No	FACU	Total % Cover of:	Multiply by:
3. Rubus armeniacus	20%	Yes	FACU	OBL species 0	x 1 = 0
4. Lonicera involucrata	10%	No	FAC	FACW species 0	x 2 = 0
5				FAC species 27%	x 3 = 81
400	60%	= Total C	Cover	FACU species 105%	x 4 = 420
Herb Stratum (Plot size: 10')	10%	Vos	EACH	UPL species 0	
Polystichum munitum Athyrium filix-femina	2%	Yes No	FACU FAC	Column Totals: 132	(A) <u>501</u> (B)
3 Geranium robertianum	15%	Yes	FACU	Prevalence Index =	$= R/\Delta = 3.80$
			17.00	Hydrophytic Vegetation	
4 5				Rapid Test for Hydron	
6				Dominance Test is >5	· -
7				Prevalence Index is ≤	3.0 ¹
8				Morphological Adapta	itions ¹ (Provide supporting
9				l	or on a separate sheet)
10				Wetland Non-Vascula	
11					ytic Vegetation ¹ (Explain)
	27%	= Total C	Cover	'Indicators of hydric soil a be present, unless disturb	and wetland hydrology must
Woody Vine Stratum (Plot size: 10')		.,		bo procent, amood distant	od or problematic.
1. Rubus ursinus	5%	Yes	FACU	Hydrophytic	
2				Vegetation	
% Bare Ground in Herb Stratum 73%		= Total C	Cover	Present? Yes	No ✓
Remarks:				1	

Depth	Matrix		Rec	lox Feature	<u>es</u>			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-7	10YR 2/2	100%					Sa. Cl. Loam	
7-18	7.5YR 3/4	97%	7.5YR 4/6	3%	С	М	Sa. Cl. Loam	
	7.0717 671		710111 1/0					
								<u>- </u>
¹ Type: C=C	Concentration, D=De	nletion RM	=Reduced Matrix (CS=Covere	ed or Coat	ed Sand G	Grains ² Loc	ation: PL=Pore Lining, M=Matrix.
	Indicators: (Appli					ou ound o		's for Problematic Hydric Soils ³ :
Histosol			Sandy Redox				2 cm	Muck (A10)
_	pipedon (A2)		Stripped Matri				_	Parent Material (TF2)
Black H	istic (A3)		Loamy Mucky	Mineral (F	1) (excep	t MLRA 1)	Very	Shallow Dark Surface (TF12)
_ ` `	en Sulfide (A4)		Loamy Gleyed		2)		Other	(Explain in Remarks)
_ :	d Below Dark Surface	ce (A11)	Depleted Matr		`		3,	an afficial and built and the state of the s
	ark Surface (A12)		Redox Dark S	,	,			rs of hydrophytic vegetation and
_	Mucky Mineral (S1) Gleyed Matrix (S4)		Depleted Dark Redox Depres	•	,			nd hydrology must be present, s disturbed or problematic.
	Layer (if present):		Redox Depres	SIUIIS (FO)			unless	s disturbed or problematic.
Type:								
Depth (ir	nches):						Hydric Soil	Present? Yes No
Remarks:							Tryune com	Tesent: Tes No F
ixemaiks.								
IYDROLO	OGY							
Wetland Hy	drology Indicators	s:						
-	icators (minimum of		d: check all that ap	(vla			Secon	dary Indicators (2 or more required)
	Water (A1)		_		/es (B9) (e	except MLI		ater-Stained Leaves (B9) (MLRA 1, 2,
=	ater Table (A2)			4A, and 4E		жоор:		4A, and 4B)
Saturati			Salt Crus		-,		□ Dra	ainage Patterns (B10)
_	/larks (B1)			nvertebrate	es (B13)			y-Season Water Table (C2)
_	nt Deposits (B2)			Sulfide O	` '			turation Visible on Aerial Imagery (C9)
_	posits (B3)				` '	Living Roo		comorphic Position (D2)
_	at or Crust (B4)		_	of Reduc	•	•		allow Aquitard (D3)
_	posits (B5)		_		,	d Soils (C6		C-Neutral Test (D5)
= '	Soil Cracks (B6)		=			01) (LRR A	<i>'</i> =	ised Ant Mounds (D6) (LRR A)
=	ion Visible on Aerial	Imagery (B7	_	on our		, ,		ost-Heave Hummocks (D7)
=	y Vegetated Concav		· —	•	,		<u>—</u>	,
Field Obse		`	,					
Surface Wa	ter Present?	Yes No	Depth (inch	es):				
Water Table			Depth (inch					
Saturation F			Depth (inch			Wet	land Hydrology	Present? Yes No
(includes ca	apillary fringe)		_				-	
	ecorded Data (stream	m gauge, mo	onitoring well, aeria	l photos, p	revious in	spections),	, if available:	
Remarks:								
Remarks:								
Remarks:								

Project/Site: Scrivanich-116th Street		City/County	y: Kirkland	/King	Sampling Date: 8/26/13
Applicant/Owner: Larry Scrivanich				State: WA	Sampling Point: S-4
Investigator(s): JR					
					Slope (%): NA
Subregion (LRR): A	Lat:			Long:	Datum:
Soil Map Unit Name: Alderwood gravelly sandy loam, 6 t					
Are climatic / hydrologic conditions on the site typical for this	time of year	ar? Yes] No∏(I	If no, explain in Remarks.)	
Are Vegetation, Soil, or Hydrology signifi	-		·	mal Circumstances" presen	it? Yes 🗸 No
Are Vegetation, Soil, or Hydrology natura				d, explain any answers in R	
SUMMARY OF FINDINGS - Attach site map			g point l	ocations, transects,	important features, etc.
Hydrophytic Vegetation Present? Yes No ✔					
Hydric Soil Present? Yes No			e Sampled		
Wetland Hydrology Present? Yes No		with	in a Wetlaı	nd? Yes No	, V
Remarks:					
VEGETATION - Use scientific names of plant	ts.				
	Absolute	Dominant		Dominance Test works	heet:
Tree Stratum (Plot size: 30')		Species?		Number of Dominant Spe	
1. Pseudotsuga menzesii	75%	Yes	FACU	That Are OBL, FACW, or	FAC: 1 (A)
2				Total Number of Domina	nt
3				Species Across All Strata	a: <u>5</u> (B)
4	750/			Percent of Dominant Spe	ecies
Sapling/Shrub Stratum (Plot size: 30')	75%	= Total C	over	That Are OBL, FACW, or	FAC: <u>20%</u> (A/B)
1. Mahonia nervosa	10%	Yes	FACU	Prevalence Index works	sheet:
2. Acer circinatum	5%	Yes	FAC	Total % Cover of:	Multiply by:
3.					x 1 = 0
4.				FACW species 0	
5				FAC species 5%	x 3 = 15
400	15%	= Total C	over	FACU species 170%	x 4 = <u>680</u>
Herb Stratum (Plot size: 10')	000/	V	FACIL	UPL species 0	x 5 = 0
1. Geranium robertianum	80%	Yes		Column Totals: 175	(A) <u>695</u> (B)
2				Prevalence Index :	= B/A = 3.97
3				Hydrophytic Vegetation	·
4. 5.				Rapid Test for Hydro	
6				Dominance Test is >	
7				Prevalence Index is	≤3.0 ¹
8				Morphological Adapta	ations ¹ (Provide supporting
9.					or on a separate sheet)
10				Wetland Non-Vascula	
11.				1 	ytic Vegetation ¹ (Explain)
	80%	= Total C	over	'Indicators of hydric soil a be present, unless distur	and wetland hydrology must
Woody Vine Stratum (Plot size: 10')				bo procent, amose dictar	ou or problematic.
1. Rubus ursinus	5%	Yes	FACU	Hydrophytic	
2				Vegetation	
% Bare Ground in Herb Stratum 20%	5%	= Total C	over	Present? Yes	No ✓
Remarks:					

							n the abser	or maioatoroly
Depth	Matrix		Red	dox Feature	es			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-5	10YR 3/2	100%					Loam	
	10111 0/2	10070					Loam	<u> </u>
5-17	2.5Y 4/3	99%	10YR 3/6	1%	С	M	Loam	
								_ -
	-							
							·	
	-				= =====		-	<u> </u>
1- 0.0							. 2	
	concentration, D=De					ed Sand G		Location: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Applie	cable to all	LRRs, unless oth	erwise no	ted.)		Indic	ators for Problematic Hydric Soils ³ :
Histosol	(A1)		Sandy Redox	(S5)			<u> </u>	cm Muck (A10)
Histic Ep	oipedon (A2)		Stripped Matri					ed Parent Material (TF2)
Black Hi	istic (A3)		Loamy Mucky	Mineral (F	1) (excep	t MLRA 1)	□ ∨	ery Shallow Dark Surface (TF12)
Hydroge	en Sulfide (A4)		Loamy Gleyed	l Matrix (F2	<u>'</u> .)			ther (Explain in Remarks)
☐ Depleted	d Below Dark Surfac	e (A11)	☐ Depleted Matr	ix (F3)				
Thick Da	ark Surface (A12)		Redox Dark S	urface (F6)			³ Indic	ators of hydrophytic vegetation and
Sandy M	Mucky Mineral (S1)		Depleted Dark	Surface (F	7)		We	etland hydrology must be present,
	Gleyed Matrix (S4)		Redox Depres	sions (F8)	,			less disturbed or problematic.
	Layer (if present):			, ,				·
Type:	, ,							
Depth (in	iches).							- 11 Post - 1040 - 17 N
Deptii (iii							Hydric S	oil Present? Yes No
Remarks:								
HYDROLO)GY							
HYDROLO								
	OGY rdrology Indicators	:						
Wetland Hy			d; check all that ap	ply)			<u>Se</u>	condary Indicators (2 or more required)
Wetland Hy	drology Indicators				es (B9) (e	xcept MLF	_	
Wetland Hy Primary Indi Surface	rdrology Indicators cators (minimum of Water (A1)		Water-St	ained Leav		xcept MLF	_	Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hy Primary Indi Surface High Wa	rdrology Indicators cators (minimum of Water (A1) ater Table (A2)		Water-St	ained Leav 4 A, and 4 E		xcept MLF	_	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Wetland Hy Primary Indi Surface High Wa Saturatio	rdrology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3)		Water-Standard Water-	ained Leav 4 A, and 4E st (B11)	3)	xcept MLF	_	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10)
Wetland Hy Primary Indi Surface High Wa Saturatio Water M	rdrology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1)		Water-St. 1, 2, 4 Salt Crus Aquatic II	ained Leav 4A, and 4E it (B11) nvertebrate	s) s (B13)	xcept MLF	_	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer	rdrology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2)		Water-St. 1, 2, 4 Salt Crus Aquatic II Hydroger	ained Leav 4A, and 4E t (B11) nvertebrate n Sulfide O	es (B13) dor (C1)		RA	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9)
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep	rdrology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3)		Water-St. 1, 2, 4 Salt Crus Aquatic II Hydroger Oxidized	ained Leav 4A, and 4E t (B11) nvertebrate n Sulfide O Rhizosphe	es (B13) dor (C1) res along	Living Roc	RA	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2)
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Appendix C

Site Photos



Wetland A and Stream A, looking southwest



Landscaped area on parcel number 3226059113



Undeveloped parcel (3226059135) with upland vegetation

Appendix D

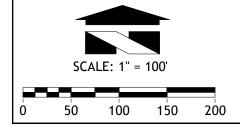
Approximate Wetland Boundary Map

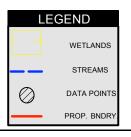
APPROXIMATE WETLAND FLAG/BOUNDARY MAP SCRIVANICH - 116TH STREET

PORTION OF SECTION 32, TOWNSHIP 26N, RANGE 05E, W.M.



PLEASE NOTE: THIS MAP IS FOR PLANNING, DISCUSSION, AND FUTURE SURVEY PURPOSES ONLY. IT DOES NOT REPRESENT A PROFESSIONAL SURVEY. WETLAND FLAGGING IS PINK AND LABELED "WETLAND DELINEATION." FLAGS ARE NUMBERED WRA-1 TO WRA-12. STREAM OHWM FLAGS ARE PINK AND NUMBERED OHW-1 THROUGH OHW-5, OHE-1 THROUGH OHE-2, AND OHEE-1 THROUGH OHEE-4.







WETLAND FLAG/BOUNDARY LOCATION MAP SCRIVANICH-116TH STREET

Larry Scrivanich P.O. Box 2174 Woodinville, WA 98072 Sheet 1/1 WRI Job #13185 Drawn by: JR Date: 9/3/13